[0285] In addition, any priority document(s) of this application is/are hereby incorporated herein by reference in its/their entirety.

What is claimed is:

1. A method for evaluating a network by predicting stabilization of the network, comprising:

providing a plurality of graphs each indicative of a respective sequential snapshot of a dynamic graph obtained over a historical time interval, the dynamic graph denoting the network;

computing a plurality of sets of meta-parameters, each set of meta-parameters computed according to a respective graph of the plurality of graphs, wherein each one of the meta-parameters denotes a network level parameter computed according to a plurality of at least one of edges and nodes of the respective graphs;

analyzing the plurality of sets of meta-parameters according to values computed based on a physics-based analytical model of an evolving physical system; and

predicting a likelihood of stabilization of the network during a future time interval according to an indication of convergence of the values according to a convergence requirement, computed based on the physics-based analytical model during the future time interval.

2. The method according to claim **1**, further comprising:

predicting a likelihood of non-stabilization of the network during the future time interval according to an indication of non-convergence of the values according to the convergence requirement, computed based on the physics-based analytical model during the future time interval;

generating instructions for adjustment of at least one component of the network to create an adjusted network; and

iterating, for the adjusted network, the providing, the computing the plurality of sets of meta-parameters, the analyzing, the predicting and the generating, until the indication of convergence is obtained.

3. The method according to claim **1**, wherein the plurality of sets of meta-parameters comprise a sequence of degree distribution power law coefficients, each degree distribution power law coefficient computed for each graph of the plurality of graphs.

4. The method according to claim **1**, wherein the plurality of sets of meta-parameters comprise a sequence of average shortest paths, each average shortest path computed for each graph of the plurality of graphs.

5. The method according to claim **1**, wherein the physics-based analytical model of the evolving physical system comprises a harmonic oscillator.

6. The method according to claim **5**, wherein the harmonic oscillator comprises a damped harmonic oscillator.

7. The method according to claim **1**, wherein the analyzing comprises fitting the set of meta-parameters to the physics-based analytical model using a best fit process.

8. The method according to claim **1**, wherein analyzing comprises fitting a sequence of degree distribution power law coefficients computed for respective graphs over the historic time interval to a damped harmonic oscillator denoted as:

$$\gamma_{fit}(t)=A\cdot e^{-\omega_0\zeta t}\cdot\sin(\omega_0\sqrt{1-\zeta^2}t+\varphi)+\gamma_\infty$$

wherein:

γ denotes a constant stable state,

$\lambda=\omega_0\zeta$ denotes exponential decay of the under-damped oscillator, wherein $1/\lambda$ denotes a prediction of the future time interval when evolution of the network stabilizes, $\omega=\omega_0\sqrt{1-\zeta^2}$ denotes angular frequency,

γ_∞ denotes a stable value of the degree-distribution power-law coefficient indicative of a stable state to which the network converges,

A denotes maximal amplitude of the oscillator, and

φ denotes phase shift.

9. The method according to claim **1**, wherein the likelihood of stabilization of the network is computed according to a predicted convergence of future values of the set of meta-parameters for the future time interval.

10. The method according to claim **9**, wherein the future values of the set of meta-parameters are predicted according to the physics-based analytical model.

11. The method according to claim **1**, further comprising providing at least one of: an indication of predicted future values of meta-parameters during the predicted stabilization of the network, and an indication of the future time interval associated with the predicted stabilization of the network.

12. The method according to claim **11**, further comprising providing an indication of confidence level associated with at least one of: the predicted likelihood of stabilization of the network, the predicted future values of the meta-parameters during the predicted stabilization of the network, and the future time interval associated with the predicted stabilization of the network.

13. The method according to claim **1**, wherein temporally adjacent graphs of the plurality of graphs overlap in at least one common node, and each graph of the plurality of graphs has a unique combination of nodes and edges that is not present in any other graph.

14. The method according to claim **1**, wherein nodes of the graphs denote entities of the network, and edges of the graphs denote interactions between the entities.

15. The method according to claim **14**, wherein entities are selected from the group consisting of: user accounts, wallets, social network accounts, bank accounts, shopping accounts, email accounts, gaming application, blockchain user accounts, mobile device, smartphone, standard phones, servers, applications being used by the user, and client terminals.

16. The method according to claim **14**, wherein edges are selected from the group consisting of: calls, multimedia objects sent from one entity to another entity, financial transactions, a game played by two or more entities, transactions associated with smart contracts, and transfer of blockchain-based tokens or cryptocurrencies.

17. The method according to claim **1**, further comprising:

performing a post-hoc analysis at a current time interval after the future time interval by analyzing a current state of the network in comparison to the predicted likelihood of stabilization of the network during the future time interval, and generating an indication of the analysis.

18. The method according to claim **17**, wherein the analyzing comprises detecting a statistically significant difference between the current state of the network and the predicted likelihood of stabilization of the network, and wherein the generated indication comprises an indication of an abnormality in the network.

19. The method according to claim **18**, wherein the statistically significant difference comprises predicted oscillations that have not occurred, and wherein the abnormality comprises an indication of a dampening effect.